

In the Specification

The two paragraphs beginning at page 11, line 11 have been amended as follows:

– FIGURE 3 shows an image that was created by loading standard electrophoresis tracking dyes (e.g., Fisher, BP633-5) that allows one to monitor the separation of a 4000 base-pair DNA sample, a 600 base-pair DNA sample and a 150 base-pair DNA sample onto a VYCOR® porous glass microscope slide 300 102a (Corning Inc., Lot#9990111). The VYCOR® porous glass microscope slide 300 102a was mounted in a submarine gel electrophoresis apparatus containing a 1/2xTBE (Tris-Borate-EDTA) running buffer. The image in FIGURE 3 illustrates the electrophoretic separations of the DNA samples that was obtained when the spotted VYCOR® porous glass microscope slide 300 102a was run in an electric field of 7.50 Volts/cm for approximately two hours. It should be noted that the migrated 4000 base-pair DNA tracking dye (right spot) was very close to where the tracking mixture was initially introduced to the VYCOR® porous glass microscope slide 300 102a. The electrophoresis results in the separation of the 150, 600 and 4000 base-pair DNA molecules. The 150 base-pair DNA fragment migrates the fastest and is visualized as the leftmost spot in FIGURE 3. It should also be noted that the vertical lines in the image are there because the VYCOR® porous glass microscope slide 300 102a was photographed on a sheet of lined paper.

FIGURE 4 shows an image illustrating an example of electrophoretic separations of molecules in the sol gel monolith 102b. In this example, a mixture of tracking dyes and a single stained DNA oligomer (50mer) was separated on a sol gel monolith substrate 400 102b having the dimensions of 4.5 cm x 1.5 cm x 0.4 cm. In particular, the sol gel monolith substrate 400 102b which had an average pore size of 160Å was mounted in a submarine gel electrophoresis apparatus containing a 1/2xTBE (Tris-Borate-EDTA) running buffer. The image in FIGURE 4 illustrates the electrophoretic separations of the DNA sample that was obtained when the sol gel monolith substrate 400 102b was run in the presence of an electric field of 12.40 Volts/cm for approximately thirty minutes. The surface of the sol gel monolith substrate 400 102b was treated with 3% N-(3-triethoxysilylpropyl) gluconamide in ethanol for around 12 hours. Details about the porous glass 102a and the sol gel monolith 102b are provided below. --